

REMARKS

Claims 7-11 and 13 are pending in the application. These claims were rejected as follows:

Claims / Section	35 U.S.C. Sec.	References / Notes
13	§101 Non-statutory subject matter	<ul style="list-style-type: none">• Conflicting statutory categories.
7-11	§102(e)	<ul style="list-style-type: none">• Bhandari (U.S. Patent No. 5,663,900).

5 Applicant has amended claim 7 and replaced claim 13 with claim 14.
Applicant further provides discussion for distinguishing the present invention, with claims as amended, from Bhandari.

 Applicant thanks the Examiner for his willingness to conduct the interview, and bases the present amendments and discussion on the helpful dialog resulting
10 from this interview.

 Applicant further bases the present amendments on claim language that was ultimately allowed in the European patent prosecution proceedings, resulting in issued European Patent EP 1 025 500 B1 (attached as an Appendix), and in which the Bhandari reference was considered. Applicant recognizes that the U.S. Patent
15 Examiner is not bound by determinations made in the European Patent Office and is free to make his own independent conclusions. Therefore, the reference is provided solely for any persuasive value it might have.

35 U.S.C. §101, NON-STATUTORY SUBJECT MATTER OF CLAIM 13

1. *Applicant has cancelled claim 13 and added claim 14 which comprises the structural components of the apparatus along with the relationships of those components with one another.*

5 In the OA, on page 5, ¶¶26-31, the Examiner indicated that the “system” of claim 12 comprises both a process and a machine, and thus is not a permitted statutory category.

Applicant has replaced claim 13 with claim 14, removing language that may serve to confuse the statutory class of the claim. Claim 14 is now clearly directed
10 towards an apparatus, and the structural components of that apparatus are enumerated after the preamble. Support for the addition of the last element of this claim may be found in the originally filed Specification at 4/4-8.

Applicant thus respectfully contends that newly added claim 14 comprises statutory subject matter and requests that the 35 U.S.C. §101 rejection be withdrawn
15 from the application.

35 U.S.C. §102(e) ANTICIPATION OF CLAIMS 7-11 BY BHANDARI

2. *Independent claim 7 has been modified to indicate that the second sequence of steps that are triggered to be executed by markers in the first sequence of steps, are executed by the core of the microprocessor or microcontroller for the
20 system to be simulated.*

Based on the telephone interview with the Examiner and helpful discussion therein, and the Examiner's comment in ¶35 of the OA regarding identifying whether

the various components are being simulated by hardware or software, Applicant has amended independent claim 7 (an included corresponding language in newly added claim 14) to clarify that the second sequence of steps are executed on the processor of the system to be simulated—the “light speed” mode is accomplished by the second sequence instructions being run in native mode by the processor of the simulation system. The first sequence of steps includes simulation code that is executed at a much slower pace on the processor of the simulation system. The markers in the first sequence of steps trigger the system to execute the second sequence of steps in the accelerated mode.

In other words, the system to be simulated comprises a core of a microprocessor or microcontroller, and peripheral modules connected to the core, where the first series of method steps is used to simulate the system behavior and comprises applying predetermined signal patterns to the system to be simulated, and the second series of method steps request and evaluate the system states brought about by the execution of the first series of method steps. These second method steps are executed by the core of the system to be simulated and are executed in an accelerated mode.

Bhandari indicates, at 2/7-13, that a software program is used to control simulation operations, (e.g., start, single-step, monitor, or interrupt), the exemplary phrases defining how the user controls the operation of the simulation operations—however, Bhandari does not teach the use of markers to trigger the light speed mode in which the second series of steps runs in the accelerated mode where the

second sequence of steps is executed by the core of the microprocessor or microcontroller for the system to be simulated, according to claim 7 as amended.

For this reason, the Applicants assert that the amended claim language clearly distinguishes over the prior art, and respectfully requests that the Examiner
5 withdraw the §102(e) rejection from the present application.

CONCLUSION

Inasmuch as each of the rejections have been overcome by the amendments and arguments presented, and all of the examiner's suggestions and requirements have been satisfied, it is respectfully requested that the present application be
10 reconsidered, the rejections be withdrawn and that this application be passed to issue.

Respectfully submitted,

15 Mark Bergner (Reg. No. 45,877)
Mark Bergner
SCHIFF HARDIN, LLP
PATENT DEPARTMENT
6600 Sears Tower
Chicago, Illinois 60606-6473
20 (312) 258-5779
Attorney for Applicants

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop
25 RCE, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on April 1, 2004.

30 Mark Bergner
Mark Bergner
Attorney for Applicants

Appl. No. 09/530,549

Reply to Office Action of December 1, 2003

APPENDIX
ISSUED CORRESPONDING EUROPEAN PATENT

- APPENDIX-

REQUEST FOR CONTINUED
EXAMINATION